

2008 - 2009 TOWN OF FUQUAY-VARINA WASTEWATER TREATMENT AND COLLECTION SYSTEM

This Report covers the fiscal year from July 1, 2008 to June 30, 2009

Historically, the purpose of collecting and treating wastewater has been to remove unsightly human waste from public view and more importantly to reduce the spread of disease.

Throughout the 1960's, public awareness regarding the quality of our nation's water resources intensified as a result of highly volatile environmental issues. With a high demand for a more effective means to protect and clean the nation's water resources, Congress in 1972 passed the Federal Water Pollution Control Act Amendments. (Better known as the Clean Water Act)

The Town of Fuquay-Varina began providing its customers with a "System Performance Report" in 1999. The purpose of the report is to keep the towns customers informed of the performance of their collection system and wastewater treatment facilities. The intent of this report is not only to inform the customer of compliance issues the town faced for the reporting period, but also to educate the towns customers as to how they themselves can contribute to protecting public health and the environment.

The Town of Fuquay-Varina wants its customers to know that it is committed to the control and prevention of pollution in the environment. Town personnel work hard to insure that the collection and treatment of wastewater meet state and federal standards.

COLLECTION SYSTEM

PERMIT # WQCS00193

The Town of Fuquay-Varina's collection system consist of approximately 122 miles of gravity sewer, approximately 14 miles of force main, and 20 duplex pump stations. Currently the Town has approximately 7,448 residential sewer customers, 466 commercial, 6 industrial, and 38 institutional customers. There is currently 1 Significant Industrial User (SIU) that requires a pretreatment discharge permit.

INFLOW/INFILTRATION

During excessive rainfall events, the sewer system is unable to carry the excess water and flooding can occur. This problem is called inflow/infiltration or "I/I". Overall, groundwater seeping into the collection system raises the volume of wastewater in the collection system. Diluted and untreated sewage can then backup and overflow from a manhole onto the ground and sometimes into creeks, or streams.

The majority of the I/I within the collection system occurs in the portion that flows to the Kenneth Creek WWTP. Many of these lines are terra-cotta lines that may be 50-60 years old.

The Town Board approved the funds to clean and inspect the portion of sewer collection system in the Kenneth Creek basin. During this project approximately 94,000 linear feet or 17% of the Towns sewer collection system was cleaned and inspected. The Town Board approved funds to begin repairing these sections, in-turn reducing the amount of I&I within our collection system.

The following table list the sanitary sewer overflows which occurred during the reporting period.

The sewer overflows were reported to NCDENR as required, and proper public notification was performed. No detrimental environmental impacts have been observed. The Town has contracted to have manholes in poor condition within the collection system

DATE	APPROX. VOLUME (gallons)	CAUSE
9/6/08	3400	Inflow

rehabilitated. This project is a part of the Towns continued efforts to eliminate infiltration and inflow into its sewer collection system.



TERRIBLE CREEK WASTEWATER TREATMENT PLANT

PERMIT # NC0066516

A 1.0 MGD average design capacity tertiary filter wastewater treatment plant which was originally put into service in July 1997 with a capacity of .5 MGD, and expanded to 1.0 MGD in 2001. This facility discharges into the Neuse River Basin. The performance of the Terrible Creek facility has been good.

During the reporting period the Terrible Creek facility experienced the following violations.

MONTH	NUMBER OF VIOLATIONS	TYPE OF VIOLATION
July 2008	2	Limit

The Terrible Creek facility experienced considerably fewer violations during this reporting period than the previous reporting period. Treatment Plant staff have adopted methods for handling biosolids which have contributed to better operation of the facility. In addition a pilot study was completed and methodology was adopted in which odors emanating within the sewer collection system are controlled without the use of liquid chemicals at the sewer lift stations thus reducing the solids loading at the treatment plant.

BRIGHTON FOREST WASTEWATER TREATMENT PLANT

PERMIT # NC0066150

The Brighton Forest Wastewater Treatment plant is located within the Brighton Forest subdivision off of Johnson Pond Road. This treatment facility was built to treat domestic sewer discharged from the homes within the Brighton Forest subdivision. Prior to the treatment plant being put into service sewer generated by the residents within the Brighton Forest subdivision was pumped and hauled to be treated at the Terrible Creek sewer treatment plant. The Brighton Forest sewer treatment plant began treating sewer November 2008.

Discharge limit violations occurred during the startup phase of the Brighton Forest facility.

MONTH	NUMBER OF VIOLATIONS	TYPE OF VIOLATION
November 2008	1	Limit
December 2008	1	Limit
March 2009	1	Limit

With establishment of the biological treatment process along with chemical addition for phosphorous removal at the Brighton Forest facility, the quality of the effluent has improved and the facility has been compliant for the remainder of this reporting period.



How YOU Can Help Prevent Sanitary Sewer Overflows

Sanitary sewer systems are designed to handle three things: **used water, human body waste, and toilet paper**. You can do some simple things that will help the Town protect water quality and prevent sanitary sewer overflows (SSOs) in Fuquay-Varina.

DO NOT Pour grease, fats and oils down the drain.

DO: Collect grease in a container and dispose of it in the garbage

DO NOT Use the toilet as a wastebasket. Disposable diapers, condoms and personal hygiene products do not belong in the sewer system.

DO: Place a wastebasket in the bathroom to dispose of solid waste.

DO NOT Use the sewer as a means to dispose of food scraps

DO: Place food scraps in waste containers or garbage bags for disposal with solid waste, or start a compost pile.

These suggestions can save you money too! Most sewer back-ups occur between the house and the Town's sewer main, where the property owner is responsible for correcting the problem. Avoiding blockages means avoiding plumbing bills. When the blockage occurs in the Town's sewer main, the Town will correct the problem.

Please call the Public Utilities Department at 552-1404, to report a sewer back-up or overflow. After hours, call the after-hours emergency number - 552-3191.

Los sistemas de drenaje sanitario están diseñados para manejar tres tipos de cosas: agua de desecho, residuos corporales y papel desechable. Puedes hacer algunas cosas sencillas que nos ayudarán a proteger la calidad del agua y prevenir los sobreflujos en el drenaje sanitario de Fuquay Varina.

NO: deseché grasas y aceites de cocina en el dren.

SI: Deposite la grasa en un recipiente y deséchelo en la basura.

NO: Utilice el inodoro como bote de basura.

SI: Coloque un bote de basura en el baño para depositar en él los desechos sólidos. Pañales

desechables, condones, y productos de higiene personal no son apropiados en el sistema de drenaje.

NO: Utilice el drenaje como si fuera para desechar restos de comida.

SI: Coloque los restos de comida en contenedores o bolsas de basura para su disposición junto a los desechos sólidos o inicie una composta.

Estas sugerencias pueden también ahorrarle dinero! La mayoría de los reflujos causados por obstrucción ocurren entre la casa y la línea principal de la ciudad, donde el propietario es responsable de la corrección de este problema. Evitar bloqueos significa evitar gastos de plomería. Cuando el bloqueo ocurra en la línea principal de drenaje del pueblo, él mismo lo corregirá. Por favor llame al departamento de servicios públicos al 552-1404, para reportar un reflujo por obstrucción o sobreflujo. En horas no hábiles, llame al teléfono de emergencia 552-3191.

**Questions or comments visit the Town of Fuquay-Varina
Website at www.fuquay-varina.org**